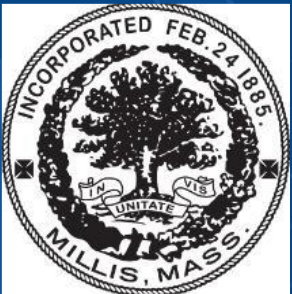


Millis Hazard Mitigation Plan 2024 Update

Public Meeting #1

January 22, 2024
Millis Select Board Meeting



Martin Pillsbury
Metropolitan Area Planning Council



Background:

What is Hazard Mitigation?



Overview of Hazard Mitigation Planning

- **Disaster Mitigation Act of 2000:**
FEMA guidelines for local & state Hazard Mitigation Plans
- **Pre-Disaster Mitigation:**
Plan for resilience *before* disaster
- **5-year plan update cycle:**
Update plan data and mitigation strategies
- **FEMA grant eligibility:**
Approved plan makes the Town eligible for FEMA project grants

TOWN OF MILLIS HAZARD MITIGATION PLAN 2018 UPDATE

FINAL PLAN
ADOPTED BY THE TOWN
NOVEMBER 19, 2018

PREPARED FOR:
TOWN OF MILLIS
900 MAIN STREET
MILLIS, MASSACHUSETTS 02054

PREPARED BY:
METROPOLITAN AREA PLANNING COUNCIL
60 TEMPLE PLACE
BOSTON, MASSACHUSETTS 02111
TEL 617-933-0700
WWW.MAPC.ORG



Overview of Hazard Mitigation Planning

Mitigation:

Actions to reduce the impacts of natural hazards with strategies including policy, projects, and programs.

- 1. What preventative actions are being taken now to reduce risks and damages?**
- 2. What additional actions can be taken to increase the Town's resilience?**

A plan for Multiple Natural Hazards



Flooding (coastal and inland)



Wind events (thunderstorms, hurricanes, tornadoes)



Winter hazards (blizzards, nor'easters)



Geologic hazards (earthquakes, landslides)



Wildfires



Extreme temperatures and drought

Breaking the Cycle of Disaster & Rebuilding



Techniques for Hazard Mitigation



Prevention (*planning and zoning*)

Property Protection (*building elevation*)

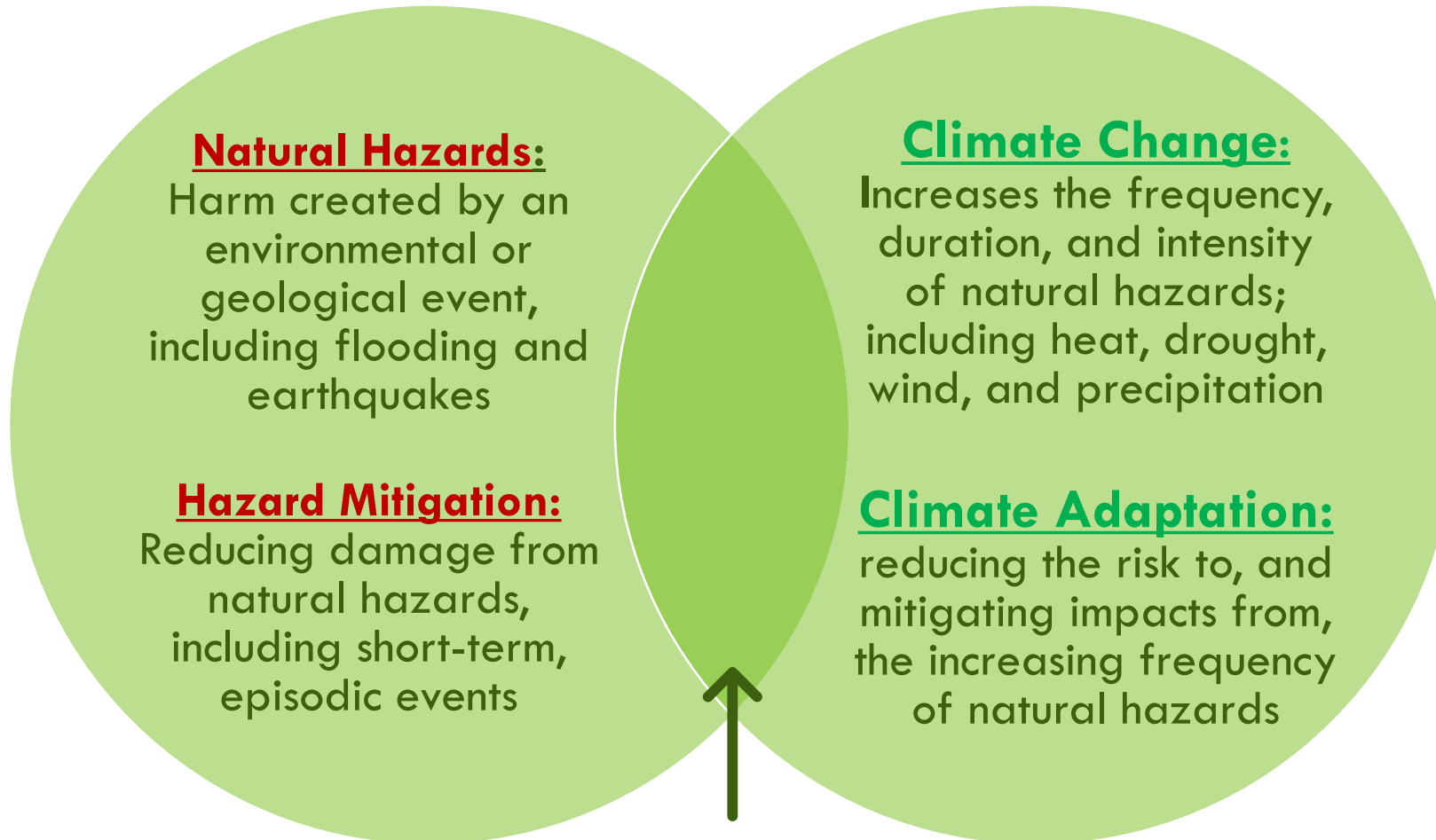
Public Education (*public outreach*)

Protect Natural Resources (*wetlands, floodplains*)

Structural Projects (*culverts, pumps, drainage*)

Emergency Services Protection
(*protection of emergency facilities & infrastructure*)

Natural Hazards and Climate Change



**Adapting to the expected impacts
of climate change is a form
of hazard mitigation**

The Planning Process



Plan Development Process

**Hazard
Identification &
Mapping**

**Assessment of
Risks &
Vulnerabilities**

**1st Public
Meeting**

**Prepare
Draft Plan**

**MEMA/FEMA
Plan Approval
Town Adoption**

We are here!

**TEAM#1:
Update & Map
Critical Facilities**

**TEAM#2:
Review Existing
Mitigation**

**TEAM #3
Review Mitigation
Goals & Strategies**

**TEAM #4
Prepare Updated
Mitigation Strategy**

**2nd Public
Meeting**

Process Guided by the Local Hazard Mitigation Team

Local Team Role:

- Participate in four meetings
- Review and endorse plan goals
- Provide local data & expertise on critical facilities and hazards
- Review & endorse the mitigation strategy for the updated plan

Representatives from:

- Town Manager
- Fire Chief
- Planning & Economic Dev.
- Police Chief
- Dept. of Public Works
- Select Board
- Board of Health
- Council on Aging
- Bus Transportation

What We've Heard



What We've Heard: Examples of Critical Facilities & Infrastructure

Municipal Facilities

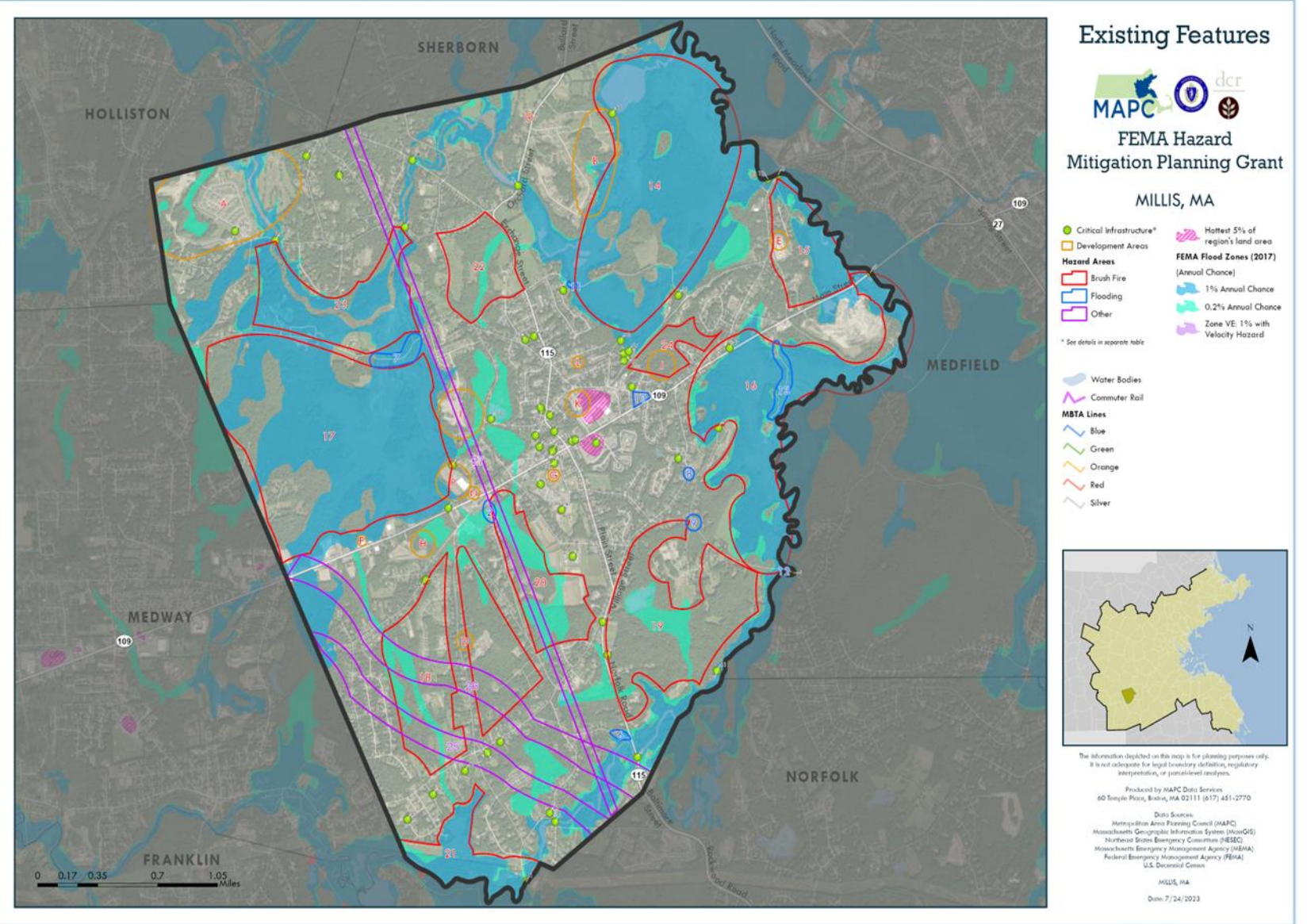
- Town Hall
- Public Safety Facilities
- DPW Facility
- Millis Public Schools
- Millis Housing Authority

Infrastructure

- Wells & Water Tanks
- Sewer Pump Stations
- Communications Tower

Community Facilities

- Millis Public Housing
- Anthology Assist. Living
- Family Health Center
- Sparhawk Academy



What We've Heard: Examples of Local Hazard Areas

Flooding area examples:

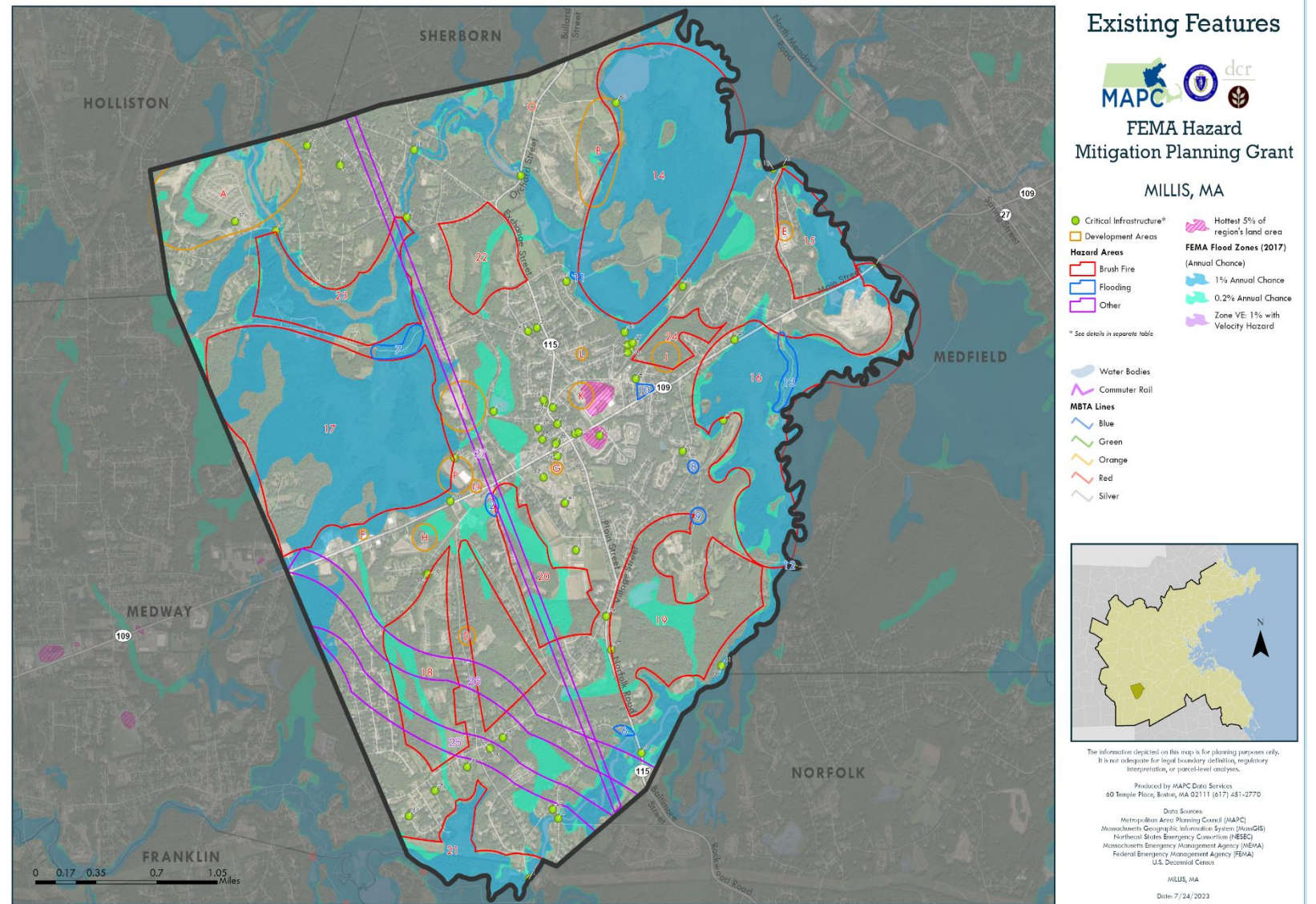
- Pleasant Street
- Baltimore Road
- Causeway Street
- Village St. & Birch St.
- Forest St. & Birch St.
- Union St/Parnell St. Triangle
- Larch Road

Brushfire Hazards:

- Army Corps Sites #1, 2, 3
- Great Black Swamp
- Boggastowe Meadow

Microbursts / Tornado

- Larch Rd. / Orchard to Dover

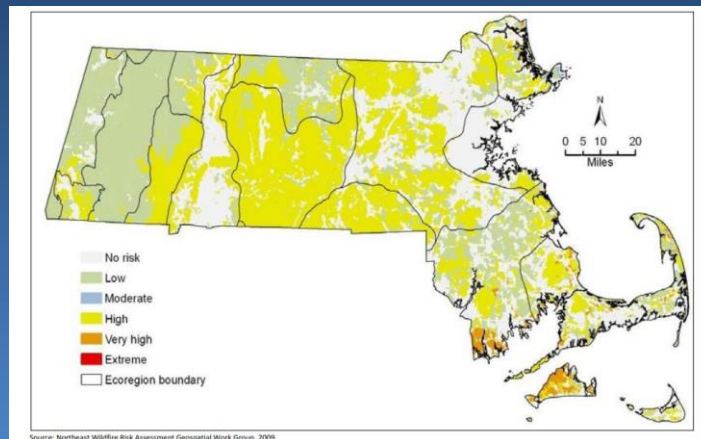


Other Natural Hazards

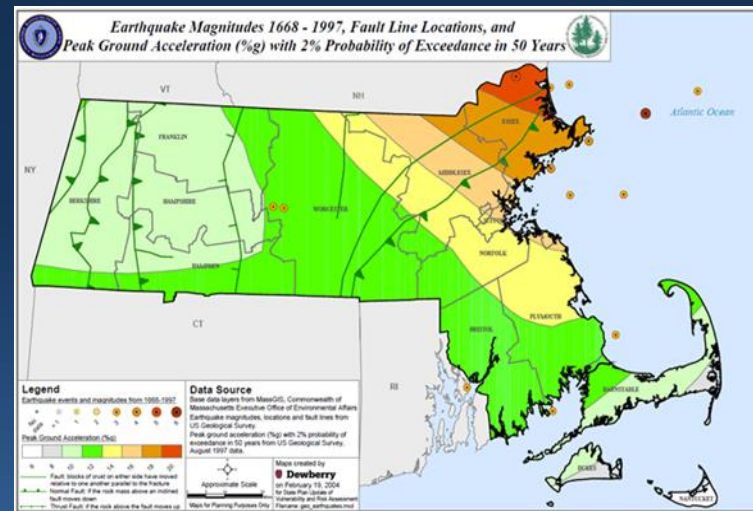
Extreme Heat

		Temperature (°F)															
Relative Humidity (%)		80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
	40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
	45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
	50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
	55	81	84	86	89	93	97	101	106	112	117	124	130	137			
	60	82	84	88	91	95	100	105	110	116	123	129	137				
	65	82	85	89	93	98	103	108	114	121	128	136					
	70	83	86	90	95	100	105	112	119	126	134						
	75	84	88	92	97	103	109	116	124	132							
	80	84	89	94	100	106	113	121	129								
	85	85	90	96	102	110	117	125	135								
	90	86	91	98	105	113	122	131									
	95	86	93	100	108	117	127										
	100	87	95	103	112	121	132										
Category		Heat Index		Health Hazards													
Extreme Danger		130 °F – Higher		Heat Stroke or Sunstroke is likely with continued exposure.													
Danger		105 °F – 129 °F		Sunstroke, muscle cramps, and/or heat exhaustion possible with prolonged exposure and/or physical activity.													
Extreme Caution		90 °F – 105 °F		Sunstroke, muscle cramps, and/or heat exhaustions possible with prolonged exposure and/or physical activity.													
Caution		80 °F – 90 °F		Fatigue possible with prolonged exposure and/or physical activity.													

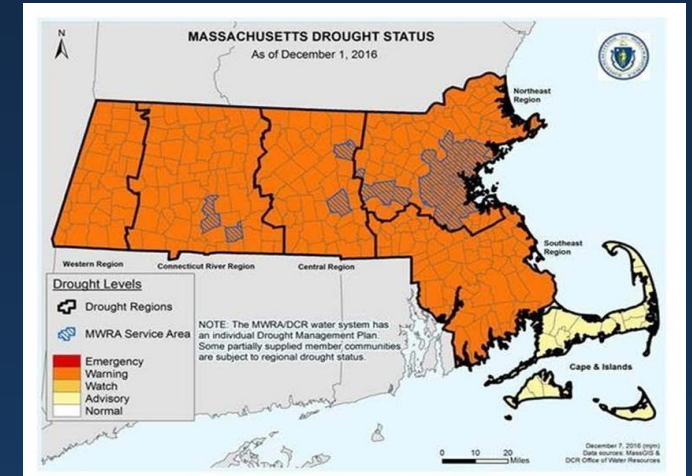
Wildfires



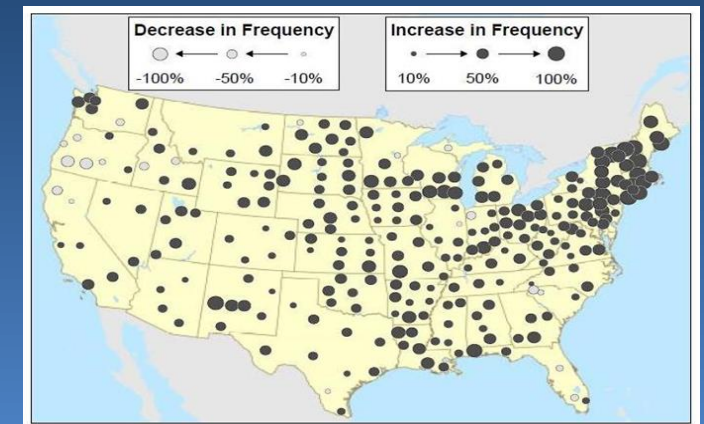
Earthquakes



Drought



Extreme Precipitation



Wind & Winter Hazards: Nor'easters/Blizzards

Storm Event	Date
Severe Winter Storm and Snowstorm	March 2018
Severe Winter Storm, Snowstorm, Flooding	January 2015
Severe Winter Storm, Snowstorm, Flooding	February 2013
Hurricane Sandy	October/November 2012



What We've Heard: Examples of Existing Mitigation Measures

Multiple Hazard Mitigation:

Municipal Vulnerability Preparedness (MVP)
Local Emergency Management Comm. (LEPC)
Comp. Emergency Management Plan (CEMP)

Flood Mitigation:

- National Flood Insurance Program (NFIP)
- Zoning – Floodplain Overlay District
- Stormwater Bylaw & Utility
- Several culvert & drainage upgrades
- Millis Flood Resiliency Plan
- Building Resiliency Across the Charles River (Climate Compact flooding model).

Brush Fire Mitigation:

- Permits required for outdoor burning
- Fire department review of subdivision plans for fire safety

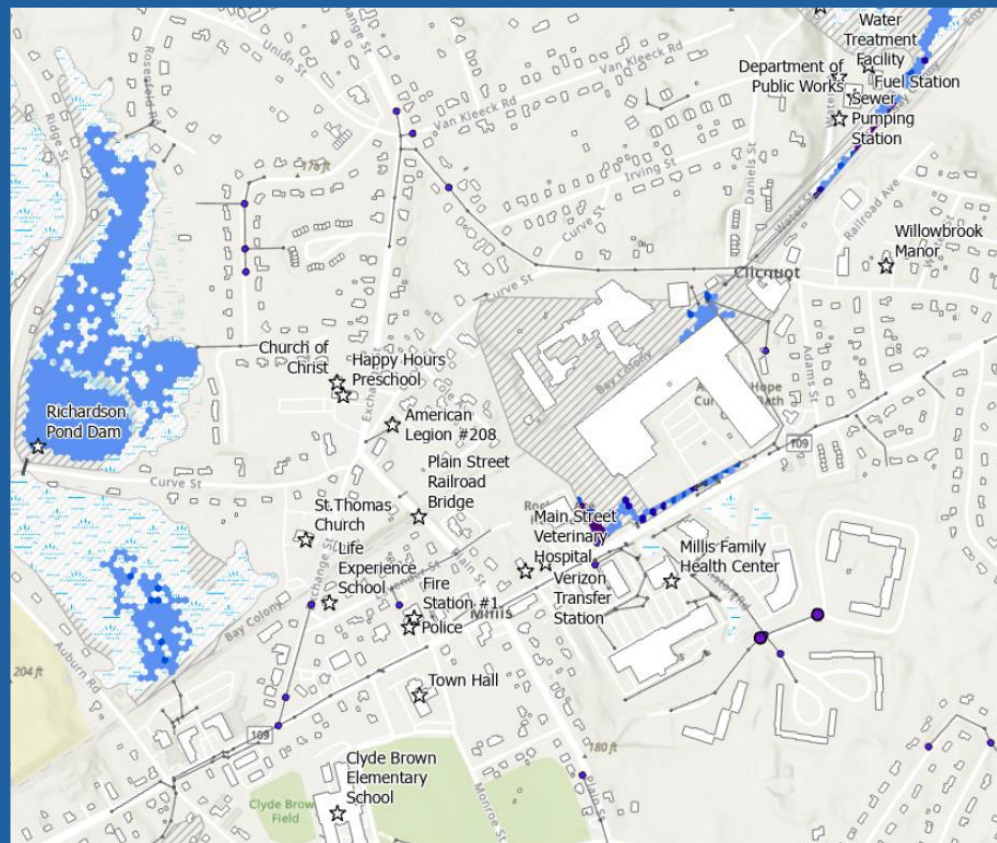
Winter Hazard Mitigation:

- Snow removal operations, roadway treatments

Wind and Winter Mitigation:

- Enhanced trees trimmed for resilience to wind and ice hazards / power outages
- MA State Building Code

Next Steps



Next Steps for Developing the Plan

- 3rd Local Team Meeting – Review status of mitigation from 2018 plan (February)
- 4th Local Team Meeting – Prepare Updated Mitigation Strategy (March)
- 2nd Public Meeting – Present Draft Plan, public comments (April)
- Submit Draft Plan – review of draft plan by MEMA & FEMA (April)
- Town Adoption of Final Plan – Select Board vote to adopt the final plan
- FEMA Approval – the Town will receive a letter approving the plan for 5 years

*After FEMA approval of the plan, Millis will be eligible for
FEMA grants for hazard mitigation projects*

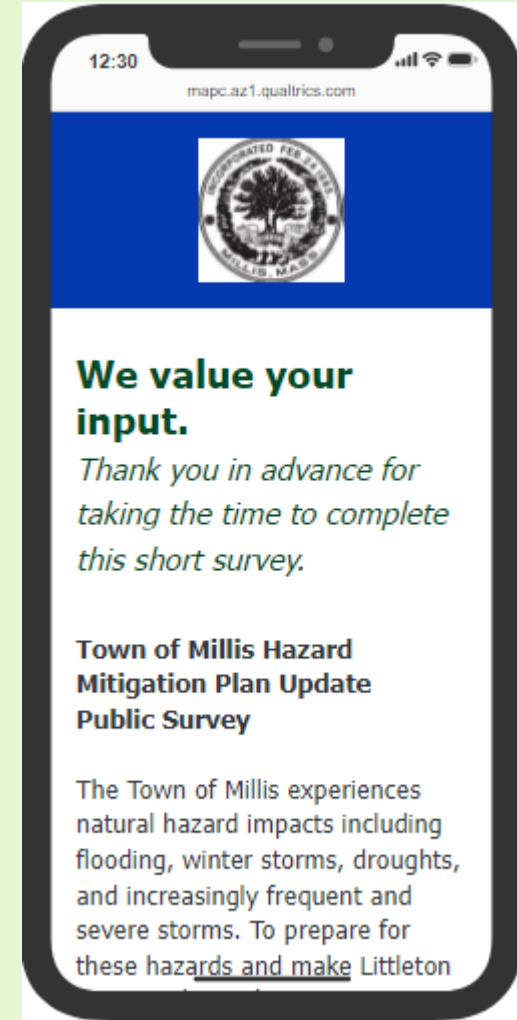
We want to hear from you: please take our *brief* survey!

We are interested in:

- 1. What hazards you are most concerned about**
- 2. How hazards have impacted you**
- 3. What mitigation actions you would like the Town to consider**

Please visit mapc.ma/MillisSurvey

Or scan this QR code:



Thank You!

Questions and Comments may be sent to:

Robert Weiss, LEED AP

Economic Development & Planning Director

Energy Manager

rweiss@millisma.gov

and/or

Martin Pillsbury

MAPC Environmental Director

MillisResilience@mapc.org

